

POLYMER CONCRETE MANHOLE SECTIONS

USING DEPARTMENT: Water Utility ISSUED: 01/01/16 REVIEWED: 04/01/16 REVISED: 04/01/16

PREPARED BY: Robert Lamb, P.E. **CITY STOCK NUMBER:**

DESCRIPTION:

Pre-cast reinforced polymer concrete manhole sections consisting of risers, conical tops, flat slab tops, and base sections. Base sections shall consist of a riser section monolithically cast with an integral floor. Base riser sections must have approved pipe connectors. Polymer concrete shall meet the requirements of ASTM D 6783 and manhole sections shall meet the requirements of ASTM C 478. Joint configuration and dimensions for 48" diameter sections shall be as shown on City of Austin Standard 506S-13. Gaskets shall be listed on SPL WW-146C. Large diameter pre-cast manholes shall not be used for junction boxes unless shown on the contract drawings. Large diameter bottom riser sections used as junction boxes shall have connected pipe size limitations as follows: 60" ID riser section for pipe to 30" maximum, 72" ID riser section for pipe to 42" maximum. Shop drawings shall be submitted to AWU for pre-cast manholes larger than 48" diameter, junction boxes, and similar structures. The shop drawings shall include flowline elevations of all incoming and outgoing pipes, elevation of transition from large diameter sections to 48" ID section, top of manhole elevation, surrounding ground elevation, as well as special construction considerations that are specified in the contract drawings.

LISTING DATE	MANUFACTURER	PRODUCT IDENTIFICATION/COMMENT	APPROVAL
01/01/15	US COMPOSITE PIPE, INC. P.O. Box 1588 Alvardo, TX 76009	48" diameter – shop drawings not required 60" diameter and larger – shop drawings required	R. Lamb

NOTE:

- 1. Sections must comply with requirements of description above and with approved details.
- 2. Base sections shall be designed to prevent insertion of connecting pipe beyond inside surface of manhole wall.
- 3. Base sections shall be monolithically pre-cast.
- 4. Flat slab tops shall only be used when specified in the contract drawings.
- 5. Minimum wall thickness for pre-cast sections is 3" for 48" diameter components.
- 6. Manhole inverts at pipe connections shall be made smooth after pipe insertion using polymer grout mix of Sauereisen Sewergard Trowable No. 210 or Sikadur 42 Grout Pak.
- 7. Lifting devices shall not penetrate thru the wall. Any lifting cable inserts shall be cut flush to the polymer concrete surface.
- 8. Joints shall be compatible with Portland cement precast sections and incorporate either the wedge seal or O-ring as shown in Standard Nos. 506S-13 and 506S-12.